

ABSTRACT

The nucleic acid and amino acid sequences of $\alpha 1$, $\alpha 2$, β and ϵ subunits of acetyl-CoA carboxylase (ACCase) from *Streptomyces*
5 *coelicolor* are provided. This subunit structure differs from that of known acyl carboxylases. Materials and methods are provided of increasing ACCase activity and production of secondary metabolites (such as polyketides and especially antibiotics) by causing expression in *Streptomyces* of such
10 nucleic acid.

Also provided are methods of increasing ACCase activity and production of secondary metabolites (such as polyketides and especially antibiotics) by culturing *Streptomyces* in the
15 presence of exogenous malonate.